

Government of the District of Columbia



Office of the Chief Technology Officer

Testimony of

**Bryan Sivak
Chief Technology Officer
District of Columbia**

before the

**HIT Policy Committee
Enrollment Work Group**

Monday, June 14, 2010

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**STATEMENT OF BRYAN SIVAK,
CHIEF TECHNOLOGY OFFICER, DISTRICT OF COLUMBIA
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Introduction

Good morning, Mr. Chairman and members of the Committee. I am Bryan Sivak, Chief Technology Officer for the District of Columbia. I appreciate the opportunity to testify on standards to facilitate enrollment in federal and state health and human services programs. As requested, I will discuss the application of the District's Open 311 Application Programming Interface (API) to these uses and will then address the four issues specified for this panel.

District of Columbia Open 311 API

An API is an interface provided by software applications that allow them to programmatically interact with each other. Businesses that operate on the web commonly use APIs to facilitate and encourage interaction with their applications and core data. The District of Columbia was the first city in the world to launch a 311 API. In 2009 we launched our 311 API as a platform for developers participating in the District's second "Apps for Democracy" innovation contest. The contest asked developers to build applications for consumer technologies to make it easier for residents to request "311" city services such as tree removals and street repairs. The code behind the District's API is open-sourced, allowing anyone to use it and build on it, so developers were able to use our 311 API to build these applications.

Examples are:

- An iPhone or Blackberry application that allows a citizen who spots a problem (such as a pothole, broken meter, or graffiti) to photograph it with the phone camera, capture the location with GPS, and instantly submit a new service request; or

- A Web-based app that allows neighborhood association members to join in a neighborhood walkthrough and submit multiple service requests on the spot for all the problems they identified.

Next the District initiated a collaboration with other cities (including San Francisco, Los Angeles, Seattle, and Boston) to create a common, multi-jurisdiction Open 311 API. Our collaboration has employed an iterative process to steadily improve the API platform. The District built an initial version (0.1), then partnered with San Francisco to build the first Open 311 API (v. 1.0), then revised that version with San Francisco based on feedback from developers and the public sector for v. 2. The result is a workable, flexible common Open 311 platform. Developers anywhere can use it to create mobile and web –based service request applications that work in and for all participating jurisdictions. For example, a District resident can use the same application to report a pothole in the District and then check the status of the pothole repair while on a visit to Boston. The very same application will allow a citizen in Boston to request and track his own city services.

We have recently expanded the uses of our open API in the District. We are building innovative applications that will allow citizens to submit broken parking meter requests--the District's highest-volume service request--directly into the District's 311 database via cell phones and smartphones. We are also using the API to integrate Open 311 into the systems on police mobile laptops so officers on patrol can enter service requests directly into the 311 database, rather than emailing them to agency employees for manual entry into the database. And we're using the API to integrate our 311 system with the Washington Post's regional service request portal, so that government employees will not have to check the Washington Post website to keep track of service requests submitted there.

Not only is our open 311 a versatile platform for our use as a government. The availability of the open-source API draws for-profit developers to create new useful applications that also have commercial potential. Examples in the 311 arena are ClickFix and a 311 application for Twitter.

The same open API model can be applied to the development of health care applications such as the one identified in your notice-a consumer portal to help manage eligibility information and processes across multiple programs and jurisdictions. In fact, an open API can be leveraged to develop applications that will allow consumers to enroll in available programs and to participate in the management of their own care across programs and providers. Government can play a critical role by leading the design of an open health care API, perhaps by a consortium representing government programs, private health plans, providers, and consumers. Once the API exists, government and the private sector alike can--and likely will--use it to develop any number of applications that help advance the implantation of health reform.

As long as appropriate standards exist for such applications, health care programs in all jurisdictions and private sector health plans can have flexibility about which applications to use in their operations. Standards for the applications developed with the API will have to address such key issues as:

- User authentication
- Authentication of information
- Common data elements and formats across programs and jurisdictions
- Security of sensitive data such as personal health information
- Restricted access to certain data
- User-friendliness of applications for a broad population with varying levels of education and computer literacy.

Issues for Panel 3

Opportunity to move towards a web-services model

As my remarks have suggested, I believe there is excellent opportunity to move to a web services model for program enrollment and probably many other aspects of health care program management. Low-cost tools for building such applications—such as our open API—are increasingly available. Consumers are increasingly comfortable with web-based commercial services for a variety of uses such as shopping and banking. Our experience in the District shows that the same is true for government services. Over the last decade we have converted about 200 physical location-based or telephone-based government services to web services, and our citizen feedback indicates high rates of customer satisfaction. Shifting to web-based services has also allowed us to reduce government operating costs while improving service delivery, an imperative for virtually all jurisdictions for the foreseeable future.

Viability of a platform-based or enterprise service approach

Here again, as my remarks have suggested, there is excellent opportunity to adopt a platform-based or enterprise service approach using an API. An API would allow developers to create applications for uses such as enrollment and health records management that would have to meet common basic standards but could be customized as necessary for separate programs (e.g., Medicare, Medicaid, FEHBP, and private health plans). With open-source APIs, such applications can be created and maintained at low cost by any private sector entity.

Role of consumer in managing own data

Whether and to what extent consumers can or will want to manage their own eligibility, enrollment, and health data is a less a technology issue than a complex health policy issue. From a technology perspective, I'm confident applications can be built that will make it easy and convenient for consumers to manage data in a secure environment. However, to make consumer

self-management workable across broad populations, we will have to address challenges such as interaction and collaboration between the consumer and the health professional, security of sensitive information, protection of certain information from access by health insurers, and other issues.

Where we need standards to accelerate progress and consumer participation

The kinds of standards that may be most useful in accelerating the move to web-based services and consumer participation fall into three areas: user-friendliness, data protection, and role definitions. For consumers to adopt web-based self-management of enrollment, records management, and other functions, the applications will have to be as clear, simple, and intuitive as the most successful consumer applications. This will be particularly true for the Medicare population, many of whom are still not tech-savvy or even tech-comfortable. Consumers will also want assurance that electronic data repositories are secure and that additional access to some data is limited to the primary care physician or other treating health care practitioner. At the same time, health care consumers will likely bring to the issue of self-management the same concern they brought to the overall national health care debates in 1993 and 2009—that their relationships with their own doctors will not be compromised by self-management regimes and tools.

Conclusion

In conclusion, I believe that there is a bright future for increased consumer participation in self-management of health care processes and records through the use of web-based services. I am confident this Committee can develop the standards necessary to facilitate that future, and I appreciate the opportunity to contribute to this work.

I will be happy to answer any questions you may have.